

display. If log-out button 6178 is clicked on, it terminates the procurement system.

As above, when starting a deal, a supplier is to fill in a supplier card and submit it. In the case of continuing to deal each year, the supplier card must be updated and submitted. These supplier cards are read by an image scanner to create image information, which is registered on DB 7a. A user within the company can view a desired supplier's supplier card and know supplier information listed on the supplier card by utilizing the supplier card information system. Supplier cards are collectively managed by supplier card information system 7 so that the respective users do not need to have them.

[8. Supplier map system]

FIG. 97 is a block diagram showing configuration of supplier map system (map information providing system) 8 illustrated in FIG. 1. Supplier map system 8 has Web server 7001, operation machine 7002 and each base point computer 7005. Operation machine 7002 has DB 8a, SQL server 7003 and MapInfo server 7004.

Supplier 7011 supplies a research table listing factory information (including its own (supplier's) information as operator of the factory) to supplier map system 8. Each base point computer 7005 is a standard personal computer used by a person in charge for instance. Factory information of the above research

table is inputted on each base point computer 7005 to generate electronic-data factory information. Each base point computer 7005 supplies factory information to operation machine 7002. Moreover, it is also possible for supplier 7011 to directly supply electronic-data factory information to operation machine 7002.

SQL server 7003 registers the above factory information on DB 8a. DB 8a stores map information and lendable asset information in addition to factory information. Factory information and map information are stored in an associated manner. To be more specific, it allows a user to find where each factory is located on a map. SQL server 7003 manages registration, search and so on of factory information and lendable asset information in DB 8a. MapInfo server 7004 manages registration, search and so on of map information in DB 8a.

Personnel department computer 7012 stores personnel data and that data is supplied to operation machine 7002. Personnel data includes information on personnel change, and supplier map system 8 can automatically change a department to which a registered user belongs. It can also erase registration of the changed user as required.

Operation machine 7002 stores a computer program and operates supplier map system 8 according to the

computer program. Web server 7001 stores a computer program and performs unified screen display according to the computer program. Web server 7001 makes various requests to operation machine 7002 and receives its responses. Operation machine 7002 makes various requests to each base point computer 7005 and receives its responses.

User computer 31 is a standard personal computer as a client for instance, and is capable of making various requests to Web server 7001 and receiving its responses. For instance, an instruction can be given to search for a factory having predetermined factory equipment and located near the office (factory) to which the user belongs. Web server 7001 searches for a factory via operation machine 7002, and displays factory information and map information of that factory on the screen of user computer 31. The user can promptly acquire factory information and map information of the desired factory.

FIG. 98 is a schematic diagram showing configuration of DB 8a. DB 8a has factory information (including information on a supplier it belongs to) 8aa, map information 8ab, lendable asset information 8ac, user information (user ID, password, user's belonging department, etc.) 8ad and security information 8ae. Factory information 8aa and map information 8ab are stored in a linked manner. Factory

information 8aa includes equipment information by
industry and by supplier (information on manufacturing,
processing and searching equipment), secondary
subcontractor information and subcontractor's supplier
5 (any supplier for a subcontractor and thereunder)
information.

FIG. 99 is a flowchart showing processing of the
supplier map system, and corresponds to processing of
step S10 in FIG. 2. Step SGA1 displays the log-in
10 screen shown in FIG. 100 on user computer 31 (FIG. 97)
waiting for input of a user ID and input of a password.
A user can enter a user ID in area 7101 and a password
in area 7102 in FIG. 100. Security can be enhanced and
a log-in by an illicit person can be prevented by
15 having user ID 7101 and password 7102 entered.

A user can change a password for security
protection by clicking on password change button 7104
with a mouse. If a user clicks on log-in button 7103
with a mouse, and if the entered user ID and password
20 are correct, the user is logged in and proceeds to step
SGA2. Step SGA2 displays the registration status
display screen shown in FIG. 101.

FIG. 101 shows registration status display screen.
Map area 7131 displays a full-screen world map. If any
25 point on the map is clicked on with a mouse, it
redispays the map by enlarging it by a zoom value
entered in zoom area 7132 centering on the clicked-on

point. If Japan is enlarged, a map can be displayed by prefecture. A zoom value is 500 to 42,000 km for instance. Collection table 7133 displays the number of factories totaled by industry in the regions displayed on map area 7131. The industries are mold, press and so on for instance. Totals by country or by prefecture are displayed according to zoom values. The total values are displayed as a bar graph at corresponding locations on map area 7131.

10 If search condition button 7134 is clicked on with a mouse, it proceeds to step SGA4 in FIG. 99 and displays the search condition/results display screen shown in FIG. 103. Also, if search path button 7135 is clicked on with a mouse, it proceeds to step SGA10 in
15 FIG. 99 and displays the search path (input) screen shown in FIG. 109. In addition, if search factory (machining ordered) button 7136 is clicked on with a mouse, it proceeds to step SGA3 in FIG. 99 and displays the search factory (machining ordered) screen shown in
20 FIG. 102.

FIG. 102 shows the search factory (machining ordered) screen of step SGA3 shown in FIG. 99. In factory name area 7141, a name of a factory to be searched for is entered in katakana. A factory is
25 equivalent to a subcontracted factory of a supplier. If search button 7142 is clicked on with a mouse, it searches for a factory name entered in factory name

area 7141 by forward matching for instance, and displays it in search results area 7144. Search results area 7144 displays a list of factories searched for. To be more specific, search results area 7144 displays factory No., factory name, kind of factory, factory address, factory contact tel. No., supplier code and supplier name. Here, works A (factory) is equivalent to a subcontracted factory of works B (factory). To be more specific, it is possible to know a relationship between a supplier and its subcontracted factory. If registration status display button 7143 is clicked on with a mouse, it returns to step SGA2 in FIG. 99 and displays the registration status display screen in FIG. 101.

FIG. 103 shows the search condition/results display screen of step SGA4 shown in FIG. 99. As designation items of search condition, designation of supplier 7151, area designation 7152, designation of base of purchase 7153, business category 7154, machine facilities (including manufacturing and processing equipment) designation 7155, designation of inspection facilities and so on 7156 can be specified. It is possible to narrow down factories to be searched by specifying these designations. In the case of specifying no designation item, all the factories are searched.

In designation of supplier 7151, one of "No

condition", "Customer code" and "Customer name" can be specified. In area designation 7152, one of "No condition", "area designation" and "reference point designation" can be specified. "Area designation" can specify two regions under an OR condition. "Reference point designation" can search factories located within a specified radius from the company's factory that is a reference point. Scale (km) can be specified then.

In designation of base of purchase 7153, a base of purchase can be specified. A search can be made based on delivery record information. In business category 7154, a business category can be specified. In machine facilities designation 7155, machine facilities and their specifications (equipment capacity) can be specified. Machine facilities include manufacturing and processing equipment. Machine facilities specifications are, for instance, the number of tons formable by injection molding equipment of resin molding. In designation of inspection facilities and so on 7156, inspection facilities and other facilities can be specified.

If search start button 7157 is clicked on with a mouse, it performs a search based on the above specified conditions, and displays a list of search results in search results area 7165 at the bottom. Moreover, if clear search condition button 7158 is clicked on with a mouse, the above specified conditions

are cleared, and if help button 7159 is clicked on with a mouse, it proceeds to step SGA5 in FIG. 99 and displays the help screen shown in FIG. 104.

5 In search results area 7165 in FIG. 103, factories meeting the above specified conditions are displayed. To be more specific, search results area 7165 displays radio button, factory No., supplier code, Japanese/non-Japanese, supplier name, condition, factory code, factory name, factory location, kind of factory and
10 business category. If Next button 7164 is clicked on with a mouse, it displays ten factories following the currently displayed ten factories. In the case where there are previous ten factories, the Prev button is displayed and if the Prev button is clicked on with a
15 mouse, it displays preceding ten factories.

If display map button 7160 is clicked on with a mouse, it proceeds to step SGA6 in FIG. 99 and displays the map display screen shown in FIG. 105. Moreover, if display whole map button 7161 is clicked on with a
20 mouse, it also proceeds to step SGA6 and displays the map display screen displaying the whole map shown in FIG. 105. Furthermore, if factory information button 7162 is clicked on with a mouse, it proceeds to step SGA7 and displays the factory information screen shown
25 in FIG. 106. In addition, if search path button 7163 is clicked on with a mouse, it proceeds to step SGA9 and displays the search (select) path screen shown in

FIG. 108.

FIG. 104 shows the help screen of step SGA5 shown in FIG. 99. The help screen displays explanation of the method of specifying search conditions on the search condition/results display screen of step SGA4 (FIG. 103). If "Return" button 7170 is clicked on with a mouse, it returns to step SGA4 in FIG. 99 and displays the search condition/results display screen in FIG. 103.

FIG. 105 shows the map display screen of step SGA6 shown in FIG. 99. Map area 7171 displays a map showing location of an applicable factory in the case where display map button 7160 or display whole map button 7161 is clicked on the search condition/results display screen in FIG. 103. In the case where a reference point is specified, it displays it with a zoom value of 5 km centering on the factory that is the reference point. In the case where scale is specified, it displays a circle on the specified scale centering on the factory that is the reference. In the case where no reference point is specified, it displays a map with a zoom value of 5 km centering on the specified factory. In the case where display whole map button 7161 (FIG. 103) is clicked on, it displays all the searched factories.

In zoom area 7174, a zoom value can be entered in a range of 0.5 to 40,000 km for instance. In scale

area 7175, in the case where scale is specified in "designated area" on the search condition/results display screen in FIG. 103, it displays that scale value. Map area 7171 displays a circle of that scale.

5 If any point in map area 7171 is clicked on, it displays a circle of a predetermined radius centering on the clicked-on point, and it searches for any factory in the circle and displays it. And in the case where a factory is clicked on with a mouse and
10 selected, it proceeds to step SGA7 in FIG. 99 and displays the factory information screen in FIG. 106. On the other hand, in the case where a factory is not selected, it redisplay the map at a specified zoom value centering on the clicked-on point.

15 If "go to initial" button 7172 is clicked on with a mouse, it redisplay the above initial map area 7171. If "search condition" button 7173 is clicked on with a mouse, it returns to step SGA4 in FIG. 99 and displays the search condition/results display screen in FIG.
20 103.

FIG. 106 shows the factory information screen of step SGA7 shown in FIG. 99. The factory information screen displays supplier overview 7181, factory overview 7182 and factory facilities 7183. Supplier
25 overview 7181 displays information date, renewal date, supplier code, supplier name, Japanese/non-Japanese, member/non-member of the Global Collaboration

Association, company situation, head office zip code,
head office address, nationality, subject office name,
capital, listing category, subcontractor category, home
page URL, sales representative name, sales

5 representative title, sales representative tel. No.,
sales representative fax. No. and sales representative
e-mail.

Factory overview 7182 displays research date,
renewal date, factory code, factory name, kind of
10 factory, Japanese/non-Japanese, capital, factory zip
code, factory address, factory location, factory
contact tel. No., number of employees, factory contact
fax. No., major delivery item, business category and
delivery record.

15 Factory facilities 7183 displays facility No.,
facility, machine, specification (tonnage in the case
of mold and press, mm in the case of ground materials
and headers), press machine specifications, machine
facilities maker name, machine type and equipped
20 number.

If search condition button 7184 is clicked on with
a mouse, it returns to step SGA4 in FIG. 99 and
displays the search condition/results display screen in
FIG. 103. Also, if secondary machining button 7185 is
25 clicked on with a mouse, it proceeds to step SGA8 in
FIG. 99 and displays the secondary machining screen in
FIG. 107.

FIG. 107 shows the secondary machining screen of step SGA8 shown in FIG. 99. The secondary machining screen displays supplier overview 7191, factory overview 7192, and secondary machining and machinable special material 7193. Supplier overview 7191 displays the same items as supplier overview 7181 shown in FIG. 106. Factory overview 7192 displays the same items as the factory overview shown in FIG. 106. Secondary machining and machinable special material 7193 displays secondary machining category name (PX (press), PX materials and so on) and secondary machining name (spot welding, arc welding and so on). A circle in the table indicates that there are machining track records in its own factory, a triangle indicates that there are machining track records only outside its own factory, and a double circle indicates that there are both machining track records. If to search condition button 7194 is clicked on with a mouse, it returns to step SGA4 in FIG. 99 and displays the search condition/results display screen in FIG. 103.

FIG. 108 shows the path search (selection) screen of step SGA9 shown in FIG. 99. The path search (selection) screen displays destination base 7201 and start base 7202. In the case where "reference point designation" is specified on the search condition/results display screen in FIG. 103, destination base 7201 displays that base. In the case

where no "reference point designation" is specified, it displays a predetermined base name. Start base 7202 displays total number of searched factories (Total), check boxes, No. of searched factories, business category, supplier code, supplier name and factory name. In destination base 7201, a desired destination base (the company's own factory for instance) can be entered or selected. In start base 7202, a desired start base (subcontracted factory of a supplier) can be selected by checking the above check boxes.

If path search button 7203 is clicked on with a mouse, it determines a check state of the above check boxes and displays an error message in the case where none is checked, and proceeds to step SGA1 in FIG. 99 in the case where one or more is checked and displays the path display screen shown in FIG. 110. On the other hand, if search condition button 7204 in FIG. 108 is clicked on with a mouse, it returns to step SGA4 in FIG. 99 and displays the search condition/results display screen in FIG. 103.

FIG. 109 shows the path search (input) screen of step SGA10 shown in FIG. 99. The path search (input) screen displays path search (input) 7211 and supplier code search 7214. In path search (input) 7211, a destination base and a start base (a supplier code and a factory code) can be entered. The destination base and start base are the same as destination base 7201

and start base 7202 shown in FIG. 108.

If path search button 7212 is clicked on with a mouse, it searches for a path based on the above entered destination base, supplier code and factory code, and proceeds to step SGA1 in FIG. 99 and displays the path display screen shown in FIG. 110. Also, if registration status display button 7213 is clicked on with a mouse, it returns to step SGA2 in FIG. 99 and displays the registration status display screen in FIG.

10 101.

In supplier code search 7214, a radio button of either supplier name 7215 or supplier code 7216 is clicked on, and supplier name 7215 or supplier code 7216 is entered. Next, if supplier search button 7217 is clicked on with a mouse, it searches for any factory belonging to the supplier based on supplier name 7215 or supplier code 7216, and displays it in search results area 7218. This search results area 7218 displays supplier code, supplier name, factory code and factory name as search results. It is possible to easily enter supplier code and factory code of path search (input) 7211 by referring to search results area 7218.

FIG. 110 shows the path display screen of step SGA11 shown in FIG. 99. Map area 7221 displays a map on which the destination base factory and start base factories specified on the path search (selection)

screen in FIG. 108 or on the path search (input) screen in FIG. 109 are all displayed. Map area 7221 also indicates the path from each of the start base factories to the destination base factory in a red solid line, and indicates the path distance between them and required time therefor by car on that path.

In zoom area 7224, a zoom value can be entered in a range of 0.5 to 3,000 km for instance. If any point in map area 7221 is clicked on with a mouse, it redisplay the map by a zoom value entered in zoom area 7224 centering on the clicked-on point.

If "go to initial" button 7222 is clicked on with a mouse, it returns to display of initial map area 7221 before entering the zoom value. "Search condition" button 7223 will be explained. In the case where it shifted from the path search (selection) screen of step SGA9 in FIG. 99 to the path display screen of step SGA11, if "search condition" button 7223 is clicked on with a mouse, it returns to step SGA4 and displays the search condition/results display screen in FIG. 103. On the other hand, in the case where it shifts from the path search (input) screen of SGA10 in FIG. 99 to the path display screen of step SGA11, if "search condition" button 7223 is clicked on with a mouse, it returns to step SGA2 and displays the registration status display screen shown in FIG. 101.

Next, lendable asset location information will be

explained. For instance, a mold used for mold working is a lendable asset and it is lent to a supplier or a factory. For instance, when a supplier or the like is about to go bankrupt, it is important to grasp lendable asset location information since such assets must be collected. Mold (lendable asset) No., No. of materials used for mold working, Part No. of parts completed by mold working, factory code of a factory where mold working was performed and supplier code of a supplier are registered on DB 8a, and so it is possible to search for location information of that mold and provide a user with the location of that mold on the map. The user can immediately collect necessary lendable assets based on that location information.

Also, in the case where a disaster such as an earthquake occurs, it is highly likely that factories around there will not function. In that case, it is possible, by regarding the location of disaster occurrence as a reference point and searching factories within its predetermined radius, to find information on the factories likely to suffer damage and take disaster measures.

As above, it is possible, by linking factory information (including supplier information) with map information and storing it on a database, to know map information based on factory information and also to know factory information based on map information. For

instance, it is possible to search factories based on factory location information and factory facilities information so as to inform a user of a factory meeting the search condition. It is also possible to indicate a path from a start base to a destination base and inform the user of the path distance and required time therefor.

[9. Supplier sales system]

FIG. 111 is a block diagram showing configuration of supplier sales system 9 illustrated in FIG. 1. Supplier sales system 9 has Web server 8001, application server 8002, Web DB server 8003 and operation machine 8004, conversion DB server 8005, mail server 8006 and administrator computer 8007. DB server 8003 has DB 9a.

Each supplier computer 8011 sends application form for utilization of supplier sales system 9 to administrator computer 8007. According to that application for utilization, administrator computer 8007 provides (sends) a setup program for performing sales based on supplier sales system 9 to supplier computer 8011. Supplier computer 8011 can send its (supplier's) sales information to operation machine 8004 by installing that setup program. Sales information is the latest parts information, substitutive parts information or clerk information, for instance. On receipt of sales information,

operation machine 8004 registers the information on DB 9a in DB server 8003. Also, if operation machine 8004 receives new sales information, mail server 8006 informs user computer 31 of arrival of the latest sales information by mail.

Personnel department computer 8012 stores personnel data and that data is supplied to operation machine 8004. Personnel data includes information on personnel change, and supplier sales system 9 can automatically change a department to which a registered user belongs. It can also erase registration of the changed user as required.

DB server 8003 manages registration, search, deletion and so on for DB 9a. On receipt of sales information from supplier computer 8011, operation machine 8004 instructs conversion DB server 8005 to update DB 9a as required. Conversion DB server 8005 processes an update, creates a log file and requests operation machine 8004 to transfer data. Operation machine 8004 updates DB 9a in DB server 8003 accordingly.

Application server 8002 stores a computer program and operates supplier sales system 9 according to the computer program. Web server 8001 stores a computer program and performs unified screen display according to the computer program. Web server 8001 makes various requests to application server 8002 and receives its

responses. Application server 8002 makes various requests to DB server 8003 and receives its responses.

User computer 31 is a standard personal computer as a client for instance, and is capable of making various requests to Web server 8001 and receiving its responses. For instance, user computer 31 can give Web server 8001 an instruction to search for and view desired sales information. Web server 8001 searches for sales information in DB 9a via application server 8002, and displays that sales information on the screen of user computer 31. A user can promptly acquire the desired sales information. In addition, based on the sales information, user computer 31 can send mail to supplier computer 8011 and access a supplier's home page to display the information.

FIG. 112 is a schematic diagram showing configuration of DB 9a. DB 9a has sales information including parts sales information 9aa, substitutive parts information 9ab, welcome news information 9ac and clerk information 9ad, and besides, user information (user ID, password, user's belonging department, etc.) 9ae and security information 9af.

FIG. 113 is a flowchart showing the supplier sales information registration process on supplier computer 8011 (FIG. 111). Step SHA1 displays the menu screen shown in FIG. 114. Menu items display "1. Electronic parts information", "2. Welcome news information" and

"3. Clerk information". If electronic parts information registration button 8131 is clicked on with a mouse, it proceeds to step SHA2 in FIG. 113 and displays the parts information registration screen shown in FIG. 115. Also, if welcome news information registration button 8132 is clicked on with a mouse, it proceeds to step SHA5 in FIG. 113 and displays the welcome news information registration screen shown in FIG. 118. In addition, if clerk information registration button 8133 is clicked on with a mouse, it proceeds to step SHA6 in FIG. 113 and displays the clerk information registration screen shown in FIG. 119. After that, if transmission button 8134 is clicked on with a mouse, it transmits registered information of the above three sales information items from supplier computer 8011 in FIG. 111 to operation machine 8004. If end button 8135 is clicked on with a mouse, it terminates the process. Moreover, the above electronic parts information is an example of parts information and is applicable to other parts information such as mechanical parts and material information.

FIG. 115 shows the parts information registration screen of step SHA2 shown in FIG. 113. On the parts information registration screen, parts information 8141, country of origin 8142, schedule information 8143 and introduction sentences 8144 can be registered. In

parts information 8141, title, type name, maker and function classification can be entered. In country of origin 8142, previous process country, next process country, controlled substance and product state can be entered. In schedule information 8143, maintenance schedule, abolition schedule, sample schedule and specification schedule can be entered. Flag 8145 shows a progress flag (completion of transmission, object of transmission, wait for admission, rejection of admission) and a deletion flag. If registered by setting the progress flag at "object of transmission", inputted information becomes transmittable. If transmitted with the deletion flag checked, the registered contents can be deleted.

If clear of input information button 8149 is clicked on with a mouse, it can clear the above input information. If registration button 8150 is clicked on with a mouse, it can register the above input information. If end button 8151 is clicked on with a mouse, it returns to step SHA1 in FIG. 113 and displays the menu screen in FIG. 114. If part No. information button 8147 is clicked on with a mouse, it proceeds to step SHA3 in FIG. 113 and displays the part No. information registration screen shown in FIG. 116. If substitution information button 8148 is clicked on with a mouse, it proceeds to step SHA4 in FIG. 113 and displays the substitution information registration

screen shown in FIG. 117.

FIG. 116 shows the part No. information registration screen of step SHA3 shown in FIG. 113. On the part No. information registration screen, parts
5 information 8161, in-company part No. information 8162, article information 8163 and reference price/month 8164 can be registered. In parts information 8161, title, type name, maker and function classification can be entered, in-company part No. information 8162, part
10 No. and size can be entered. In article information 8163, package, quality standard information, production information, delivery date information, delivery packing form, environmental consideration, currency and unit of quantity can be entered. Flag 8145 shows a
15 progress flag (completion of transmission, object of transmission, wait for admission, rejection of admission) and a deletion flag.

If clear of input information button 8149 is clicked on with a mouse, it can clear the above input
20 information. If registration button 8150 is clicked on with a mouse, it can register the above input information. If end button 8151 is clicked on with a mouse, it returns to step SHA1 in FIG. 113 and displays the menu screen in FIG. 114. If parts information
25 button 8146 is clicked on with a mouse, it returns to step SHA2 in FIG. 113 and displays the parts information registration screen shown in FIG. 115. If

substitution information button 8148 is clicked on with a mouse, it proceeds to step SHA4 in FIG. 113 and displays the substitution information registration screen shown in FIG. 117.

5 FIG. 117 shows the substitution information (substitutive parts information) registration screen of step SHA4 shown in FIG. 113. On the substitution information registration screen, parts information 8171 and substitution information 8172 can be registered.

10 In parts information 8171, title, type name, maker and function classification can be entered. In substitution information (substitutive parts information) 8172, substitutable type name, maker name and substitution condition can be entered. A supplier

15 can offer parts and products substitutable for parts and products of other makers. Flag 8145 shows a progress flag (completion of transmission, object of transmission, wait for admission, rejection of admission) and a deletion flag.

20 If clear of input information button 8149 is clicked on with a mouse, it can clear the above input information. If registration button 8150 is clicked on with a mouse, it can register the above input information. If end button 8151 is clicked on with a

25 mouse, it returns to step SHA1 in FIG. 113 and displays the menu screen in FIG. 114. If parts information button 8146 is clicked on with a mouse, it returns to

step SHA2 in FIG. 113 and displays the parts
information registration screen shown in FIG. 115. If
part No. information button 8147 is clicked on with a
mouse, it proceeds to step SHA3 in FIG. 113 and
5 displays the part No. information registration screen
shown in FIG. 116.

FIG. 118 shows the welcome news information
registration screen of step SHA5 shown in FIG. 113. On
the welcome news information registration screen,
10 welcome news information 8181 can be registered. In
welcome news information 8181, contents of information,
covered period, title, details, home page address and
desirable information deletion date can be entered. As
the above contents of information, in addition to
15 introduction of new products, news/topics from the
company, journal/catalog, holding guidance of
exhibition/seminar, latest technical information
(unique technology), introduction of new facilities,
situation of production/sales, market trends
20 (tight/redundant parts), environmental warranty
measures and so on can be selected (entered). If
registration button 8150 is clicked on with a mouse, it
can register the above input information. If end
button 8151 is clicked on with a mouse, it returns to
25 step SHA1 in FIG. 113 and displays the menu screen in
FIG. 114.

FIG. 119 shows the clerk information registration

screen of step SHA6 shown in FIG. 113. On the clerk
information registration screen, clerk information
8191, in-house territory and business 8192, main
handling items to our company 8193, handling maker 8194
5 and comments 8195 can be registered. In clerk
information 8191, name, e-mail (electronic mail)
address, title, clerk code, position, contact address,
tel. No., fax No. and home page address can be
entered. Flag 8196 shows a transmission flag (object
10 of transmission, completion of transmission) and a
deletion flag. If registration button 8150 is clicked
on with a mouse, it can register the above input
information. If end button 8151 is clicked on with a
mouse, it returns to step SHA1 in FIG. 113 and displays
15 the menu screen in FIG. 114.

FIG. 120 is a flowchart showing processing of
supplier sales system 9 on receipt of sales information
from a supplier. In step SHB1, operation machine 8004
(FIG. 111) receives sales information registered and
20 sent by the above supplier. In step SHB2, operation
machine 8004 registers the received sales information
on DB 9a in DB server 8003. In step SHB3, operation
machine 8004 informs administrator computer 8007 (FIG.
111) of supplier sales system 9 of the number of
25 received pieces of sales information by mail every day.
Operation machine 8004 also informs user computer 31
(FIG. 111) of an outline of newly provided sales

information by mail. Each individual user can specify a type of information to be received by mail. For instance, a person in charge of electronic parts does not need information on mechanical parts and is allowed to receive only information on electronic parts by mail. A user can learn an outline of the latest sales information from the mail and further learn details thereof by accessing supplier sales system 9 described next.

FIG. 121 is a flowchart showing processing of supplier sales system 9 on access by a user. If user computer 31 (FIG. 111) accesses supplier sales system 9, supplier sales system 9 performs the following process. Step SHC1 displays the log-in screen shown in FIG. 122 on user computer 31 (FIG. 111) waiting for input of a user ID and input of a password. A user can enter a user ID in area 8201 in FIG. 122 and a password in area 8202. Security can be enhanced and a log-in by an illicit person can be prevented by having user ID 8201 and password 8202 entered.

A user can change a password for security protection by clicking on password change button 8204 with a mouse. If a user clicks on log-in button 8203 with a mouse, and if the entered user ID and password are correct, the user is logged in and proceeds to step SHC2. Step SHC2 displays the menu screen shown in FIG. 123.

FIG. 123 shows the menu screen of step SHC2 in FIG. 121. Display area 8111 indicates a date of information. Display area 8112 indicates a log-in user ID (user ID). Display area 8113 indicates a date of log-in. Display area 8114 indicates an IP address of log-in. Based on this IP address, the department to which the user belongs can be identified. As the source can be identified by the displays of these display areas 8112 to 8114 when a hard copy of the screen is made, it is possible to prevent leakage of information to outside. To be more specific, there is an effect of keeping a user from making a hard copy since information on users who made a hard copy is displayed.

Menu items 8211 displays "1. Latest parts sales information", "2. Search of substitutive parts information", "3. Latest welcome news information" and "4. Latest supplier clerk information and search of information". A user can select a desired one of these four items. If item No. 1 is selected, it proceeds to step SHC3 in FIG. 121 and displays the parts information list screen. If item No. 2 is selected, it proceeds to step SHC6 in FIG. 121 and displays the substitutive parts information search screen shown in FIG. 126. If item No. 3 is selected, it proceeds to step SHC9 in FIG. 121 and displays the welcome news information list screen shown in FIG. 129. In item No.

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category, maker code, maker name, type name, function
classification code, parts state, controlled substance,
country of origin: pre-process, country of origin:
post-process, supplier code, supplier name, our part
5 No. and update date can be entered. If "Reference" of
each item is clicked on with a mouse, it searches for
and displays each item, and so a desired item can be
easily entered. The above conditions can be cleared by
clicking on clear button 8223 with a mouse. If search
10 button 8222 is clicked on with a mouse, it searches for
parts information meeting the above conditions,
proceeds to step SHC3 in FIG. 121 and displays the
parts information list screen. If display of
predetermined parts information details is instructed
15 on the parts information list screen, it proceeds to
step SHC5 in FIG. 121 and displays the parts
information details screen shown in FIG. 125.

FIG. 125 shows the parts information details
screen of step SHC5 shown in FIG. 121. Displays areas
20 8111 to 8114 and buttons 8121 to 8124 are the same as
above. Parts information details displays area 8231
displays title, type name, maker, business category,
function classification, information No., supplier
name, supplier code, administrator division, clerk
25 name, clerk code, country of origin: pre-process,
country of origin: post-process, controlled substance,
product state, maintenance schedule, abolition

schedule, sample schedule, specification schedule,
introduction sentences, our part No., our size and
package.

FIG. 126 shows the substitutive parts information
5 search screen of step SHC6 shown in FIG. 121. Displays
in display areas 8111 to 8114 and buttons 8121 to 8124
are the same as above. In search condition input area
8241, type name for substitutive search, function
classification code for substitutive search and maker
10 name for substitutive search can be entered. The above
conditions can be cleared by clicking on clear button
8244 with a mouse. If search button 8243 is clicked on
with a mouse, it searches for a substitutive part
meeting the above input conditions and proceeds to step
15 SHC7 to display the substitutive parts information list
screen shown in FIG. 128.

Moreover, if "Reference" area 8242 of the above
function classification code is clicked on with a
mouse, it proceeds to step SHC16 in FIG. 121 and
20 displays the code help screen shown in FIG. 127. In
condition input area 8251, table, search item, match
type and search keyword can be entered. If search
button 8252 is clicked on with a mouse thereafter, it
searches for and displays a function classification
25 code and so on meeting the above input conditions.
Thus, a function classification code and so on can be
more easily entered. Items other than a function

classification code can also be searched for.

FIG. 128 shows the substitutive parts information list screen of step SHC7 shown in FIG. 121. Displays in display areas 8111 to 8114 and buttons 8121 to 8124 are the same as above. List area 8266 shows a list of substitutive parts information meeting the above input conditions. To be more specific, list area 8266 shows update date, search type name, function classification, maker, substitutive part type name and maker and so on. If previous list button 8261 is clicked on with a mouse, it displays a list preceding the currently displayed substitutive parts information. If a first number of substitutive parts information to be displayed is entered in first number area 8262 and button 8263 is clicked on with a mouse, it displays substitutive parts information from that first number. If sort item 8264 is entered and sort button 8265 is clicked on with a mouse, it displays substitutive parts information sorted in that order of items. If any substitutive parts information button 8267 is clicked on with a mouse, it proceeds to step SHC8 in FIG. 121 and displays the substitutive parts information details screen that is the same as FIG. 125. The substitutive parts information details screen is the same as the details screen in FIG. 125. Also, if search screen button 8268 is clicked on with a mouse, it returns to step SHC6 in FIG. 121 and displays the substitutive

parts information search screen in FIG. 126. A user can search a more advantageous part instead of a currently used one.

FIG. 129 shows the welcome news information list screen of step SHC9 shown in FIG. 121. Displays in display areas 8111 to 8114 and buttons 8121 to 8124 are the same as above. List area 8281 displays a list of welcome news information. To be more specific, list area 8281 displays welcome news information No., clerk name, update date, business category, title, supplier, information contents, home page address, covered period (starting date) and covered period (ending date). If sort item 8284 is entered and sort button 8285 is clicked on with a mouse, it displays welcome news information sorted in that order of items. If each welcome news information clerk area 8283 is clicked on with a mouse, it displays a contact of the clerk in charge of that supplier. In addition, if each welcome news information No. button 8282 is clicked on with a mouse, it proceeds to step SHC11 in FIG. 121 and displays the welcome news information details screen shown in FIG. 131. Furthermore, if search screen button 8286 is clicked on with a mouse, it proceeds to step SHC10 in FIG. 121 and displays the welcome news information search screen in FIG. 130.

FIG. 130 shows the welcome news information list screen of step SHC10 shown in FIG. 121. Displays in

display areas 8111 to 8114 and buttons 8121 to 8124 are the same as above. In condition input area 8271, business category, supplier code, supplier name, information contents, title and update date can be entered. If "Reference" area 8272 of each item is clicked on with a mouse, it proceeds to step SHC16 in FIG. 121 and displays the code help screen (FIG. 127). In addition, the above conditions can be cleared by clicking on clear button 8275 with a mouse. After entering conditions, if search button 8274 is clicked on with a mouse, it searches for welcome news information meeting the above input conditions, proceeds to step SHC9 in FIG. 121 and displays the welcome news information list screen in FIG. 129.

FIG. 131 shows the welcome news information details screen of step SHC11 shown in FIG. 121. Displays in display areas 8111 to 8114 and buttons 8121 to 8124 are the same as above. Details display area 8291 displays details of predetermined welcome news information specified above. To be more specific, details display area 8291 displays supplier name, supplier code, position name, administrator division code, clerk name, clerk code, business category, information number, information contents, home page address, title, detailed sentences, covered period (starting date), covered period (ending date) and desirable deletion date. In principle, supplier sales

system 9 deletes the welcome news information from DB
9a on the desirable deletion date. If search screen
button 8292 is clicked on with a mouse, it returns to
step SHC10 in FIG. 121 and displays the welcome news
5 information search screen in FIG. 130.

FIG. 132 shows the supplier clerk search screen of
step SHC12 shown in FIG. 121. Displays in display
areas 8111 to 8114 and buttons 8121 to 8124 are the
same as above. In condition input area 8301, business
10 category, supplier code, supplier name, handling maker
code and handling maker name can be entered. If
"Reference" area 8302 of each item is clicked on with a
mouse, it proceeds to step SHC16 in FIG. 121 and
displays the code help screen (FIG. 127). In addition,
15 the above conditions can be cleared by clicking on
clear button 8304 with a mouse. Furthermore, if search
button 8303 is clicked on with a mouse, it searches for
supplier clerk information meeting the above input
conditions, proceeds to step SHC13 in FIG. 121 and
20 displays the supplier clerk list screen shown in FIG.
133.

FIG. 133 shows the supplier clerk list screen of
step SHC13 shown in FIG. 121. Displays in display
areas 8111 to 8114 and buttons 8121 to 8124 are the
same as above. List area 8311 displays a list of
25 supplier clerk information meeting the above input
conditions. To be more specific, list area 8311

displays supplier clerk information No., update date, supplier code, supplier name, business category, clerk name, tel. No., e-mail address and administrator mark. If each clerk information e-mail address area 8313 is
5 clicked on with a mouse, it proceeds to step SHC17 in FIG. 121 and mail can be transmitted to that e-mail address. Moreover, if each clerk information No. button 8312 is clicked on with a mouse, it proceeds to step SHC14 in FIG. 121 and displays the supplier clerk
10 details screen in FIG. 134. Also, if search screen button 8314 is clicked on with a mouse, it returns to step SHC12 in FIG. 121 and displays the supplier clerk search screen in FIG. 132.

FIG. 134 shows the supplier clerk details screen
15 of step SHC14 shown in FIG. 121. Displays in display areas 8111 to 8114 and buttons 8121 to 8124 are the same as above. Details display area 8321 displays details of predetermined supplier clerk information specified above. To be more specific, details display
20 area 8321 displays business category, supplier name, supplier code, position name, administrator department code, clerk title, administrator mark, clerk name, address, zip code, tel. No., fax No., e-mail address, home page address, territory or office, major handling
25 product, handling maker, comments, update date and date of application for participation. If e-mail address area 8322 is clicked on with a mouse, it proceeds to

step SHC17 in FIG. 121 and mail can be transmitted to that e-mail address. Moreover, if home page address area 8323 is clicked on with a mouse, it proceeds to step SHC15 in FIG. 121 and displays the home page of that home page address. Also, if search screen button 8324 is clicked on with a mouse, it returns to step SHC12 in FIG. 121 and displays the supplier clerk search screen in FIG. 132.

As above, a supplier can actively perform sales to supplier sales system 9. An employee of the company having supplier sales system 9 can view sales information from the supplier without being limited by time and distance. It is also possible to exploit a valuable information source in a significant manner by sharing sales information from the supplier. The employee of the company can also know the latest trends and information without visiting a supplier, and thus advance action can be taken. Supplier sales system 9 also supports sales activities of the supplier, and the supplier can register and send sales information so that it will be collectively provided to all the employees.

In addition, when information that production of a certain part will be stopped is received, if the information is provided to a database for creating an engineering drawing of a design department in the company, that design department can delete the part

from design objects so that it will not be used in future.

Moreover, the above sales information can be applied not only to parts information but also to material information and product information.

Furthermore, while the above sets forth an example of indicating a home page address of a supplier which displays its home page if that address is specified, it is also possible, if the supplier's home page has an applicable product guide or the like, to indicate the home page address so that the home page of the product guide or the like indicated by the address will be displayed when that address is specified.

It is also possible to register information via the Internet, dividing the suppliers into those which have dealings with the company (contracted) and those which have no dealing yet. In addition, it is possible to arrange it so that an addressee in-house (by department, etc.) can be specified on registration. It also is possible, via the Internet in this case, to register, change and delete a supplier card information system, a supplier map system, part or product type name, maker information, environmental information and so on.

[10. Bulletin board mail system]

FIG. 135 is a block diagram showing configuration of bulletin board mail system 10 illustrated in FIG. 1.

Bulletin board mail system 10 has Web server 9001 and script server 9002, and can be divided into a bulletin board information providing system and a supplier evaluation system. Web server 9001 stores a computer program and operates the bulletin board information providing system according to the computer program so as to provide first service 9003 and second service 9004. First service 9003 has a computer conference service. Second service 9004 has services such as a member list, conferences information, minutes list, free talk and online manuals. First service 9003 and second service 9004 are bulletin board information on parts or materials. Script server 9002 stores a computer program and operates the supplier evaluation system according to the computer program so as to provide third service 9005. Third service 9005 has a supplier evaluation service.

User computer 31 can, by accessing Web server 9001, exchange opinions with other members via first service (computer conference) 9003 and view various data via second service (member list, etc.) 9004. Also, each base point user computer 31 inputs evaluation score of each supplier on a supplier evaluation sheet and sends it to script server 9002. On receipt of supplier evaluation sheets from the base points, script server 9002 automatically totals the evaluation score inputted on the supplier evaluation

sheets of all the base points. User computer 31 can view and exploit evaluation results of each supplier by receiving them from script server 9002 by mail and accessing script server 9002.

5 FIG. 136 is a flowchart showing processing of the bulletin board information providing system (Web server 9001). If user computer 31 (FIG. 135) accesses Web server 9001 (board information providing system), the bulletin board information providing system performs the following process. Step SIA1 displays the log-in screen shown in FIG. 139 on user computer 31 waiting for input of a user ID and input of a password. A user can enter a user ID in area 9101 in FIG. 139 and a password in area 9102. Security can be enhanced and a log-in by an illicit person can be prevented by having user ID 9101 and password 9102 entered.

10 A user can change a password for security protection by clicking on password change button 9104 with a mouse. If a user clicks on log-in button 9103 with a mouse, and if the entered user ID and password are correct, the user is logged in and proceeds to step SIA2. Step SIA2 displays the menu screen shown in FIG. 140.

15 FIG. 140 shows the menu screen of step SIA2 shown in FIG. 136. Display area 9131 shows a title. Display area 9132 shows the access number. Menu area 9133 displays, as selection menu items, "1. Computer

conference", "2. Member list", "3. Conferences
information", "4. Minutes list", "5. Free talk", "6.
Online manual" and "7. Support contact point". If each
number is selected, it proceeds to one of step SIA4 to
5 SIA10 via the determination step of step SIA3.

If No. 1 is selected, it proceeds to step SIA4 and
performs a computer conference process. The computer
conference process is a bulletin board system for the
purpose of exchanging information, a user can freely
10 write on it and all the other users can see the
contents of the writing. If No. 2 is selected, it
proceeds to step SIA5 and performs a member list
process. The member list process displays a member
list of each organization. If No. 3 is selected, it
15 proceeds to step SIA6 and performs a conferences
information process. The conferences information
process provides bulletin board information on
conferences. If No. 4 is selected, it proceeds to step
SIA7 and performs a minutes list process. The minutes
20 list process stores minutes of conferences so that a
user can view them. If No. 5 is selected, it proceeds
to step SIA8 and performs a free talk process. The
free talk process is a bulletin board system for the
purpose of exchanging information freely, and a user
25 can freely write on it and all the other users can
share the contents of the writing. If No. 6 is
selected, it proceeds to step SIA9 and performs an

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online manual process. The online manual process provides an instruction manual on an operation method of the bulletin board information providing system. If No. 7 is selected, it proceeds to step SIA10 and performs a support contact point process. The support contact point process informs the user of how to contact a support contact point of the bulletin board information providing system so that an inquiry by e-mail to the support contact point will be possible.

FIG. 137 is a flowchart showing processing of a computer conference of step SIA4 shown in FIG. 136. Step SIB1 displays the menu screen of the computer conference shown in FIG. 141. Displays in display areas 9131 to 9133 are the same as above. Selection menu items of the computer conference display new chat 9141, per category 9142, per creator 9143 and date order 9144. If each item is selected, it proceeds to one of the steps SIB3 to SIB6 via the determination step of step SIB2. If per category 9142 is selected, it proceeds to step SIB3 to perform processing per category. If processing per creator 9143 is selected, it proceeds to step SIB4 to perform processing per creator. If date order 9144 is selected, it proceeds to step SIB5 to perform processing in date order. If new chat 9141 is selected, it proceeds to step SIB6 to perform processing per new chat.

FIG. 138 is a flowchart showing details of

processing per category of step SIB3 shown in FIG. 137. Step SIC1 displays the computer conference per category screen shown in FIG. 142. Displays in display areas 9131 to 9133 are the same as above. Per category area 9154 lists and displays computer conference items classified per category. If words to be searched are entered in input box 9151 and search button 9152 is clicked on with a mouse, it searches for any computer conference having a document with the entered words and displays it in per category area 9154. If a desired computer conference item area in per category area 9154 is clicked on with a mouse, it proceeds to step SIC3 via the determination step of step SIC2 in FIG. 138, and displays the chat contents screen shown in FIG. 143.

FIG. 143 shows the chat contents screen of step SIC3 shown in FIG. 138. Displays in display areas 9131 to 9133 are the same as above. Chat contents area 9161 displays chat contents in the computer conference selected above. If per category area 9162 is clicked on with a mouse, it returns to step SIC1 in FIG. 138 and displays the per category screen in FIG. 142. Also, if per creator area 9163 is clicked on with a mouse, it proceeds to step SIB4 in FIG. 137. Moreover, if date order area 9164 is clicked on with a mouse, it proceeds to step SIB5 in FIG. 137. In addition, when responding to a document of this computer conference,

if response area 9165 is clicked on with a mouse, it proceeds to step SIC4 in FIG. 138 and displays the response screen shown in FIG. 144.

FIG. 144 shows the response screen of step SIC4 shown in FIG. 138. Displays in display areas 9131 to 9133 are the same as above. On the response screen, title 9171, creator 9172 and response contents 9173 can be entered. After entry, if send button 9177 is clicked on with a mouse, it returns (transmits) the entered contents. Moreover, if per creator area 9174 is clicked on with a mouse, it returns to step SIC1 in FIG. 138 and displays the per category screen in FIG. 142. Furthermore, if per creator area 9175 is clicked on with a mouse, it proceeds to step SIB4 in FIG. 137. In addition, if date order area 9176 is clicked on with a mouse, it proceeds to step SIB5 in FIG. 137.

On per category screen shown in FIG. 142, if new chat area 9153 is clicked on with a mouse, it proceeds to step SIC5 via step SIC2 in FIG. 138, and displays the new chat screen shown in FIG. 145. It also displays the new chat screen shown in FIG. 145 in step SIB6 in FIG. 137.

FIG. 145 shows the new chat screen. Displays in display areas 9131 to 9133 are the same as above. On the new chat screen, must input items 9181, input item 9182 and chat contents 9183 can be entered. In must input items 9181, title, creator and category can be

entered. In input items 9182, supplier code, supplier name, maker code, maker name, part No. and type name can be entered. If reset button 9185 is clicked on with a mouse, the entered contents can be reset.

- 5 Moreover, if registration button 9184 is clicked on with a mouse, it proceeds to step SIC6 in FIG. 138 and displays the registration screen shown in FIG. 146.

FIG. 146 shows the registration screen of step SIC6 shown in FIG. 138. Displays in display areas 9131
10 to 9133 are the same as above. The above registered chat contents are transmitted, and are registered and reflected in a computer conference approximately five minutes later. If reread approximately five minutes thereafter, the transmitted contents will be displayed
15 on the bulletin board. If per category area 9191 is clicked on with a mouse, it returns to step SIC1 in FIG. 138 and displays the per category screen in FIG. 142. Moreover, if per creator area 9192 is clicked on with a mouse, it proceeds to step SIB4 in FIG. 137. In
20 addition, if date order area 9193 is clicked on with a mouse, it proceeds to step SIB5 in FIG. 137.

While details of processing per category of step SIB3 shown in FIG. 137 have been described above, processing per creator of step SIB4 and processing in
25 date order of step SIB5 are the same as the above processing per category except that computer conferences are displayed per creator and in date

order.

FIG. 147 shows the member list screen displayed in processing of a member list of step SIA5 shown in FIG. 136. Displays in display areas 9131 to 9133 are the same as above. The member list screen displays each organization member list 9201. For instance, member list 9201 indicates member No., title, office, department, section, name and so on.

FIG. 148 shows conference information screen displayed in processing of conference information of step SIA6 shown in FIG. 136. Displays in display areas 9131 to 9133 are the same as above. Conference information area 9213 lists and displays conference information items. To be more specific, conference information area 9213 displays notes and issuance date of each item. If words to be searched are entered in input box 9211 and search button 9212 is clicked on with a mouse, it searches for any conference information having a document with the entered words and displays it in conference information area 9213. If a desired conference information item in conference information area 9213 is clicked on with a mouse, it displays the conference information contents screen shown in FIG. 149.

FIG. 149 shows the conference information contents screen. Displays in display areas 9131 to 9133 are the same as above. Conference information 9221 displays

conference information contents such as date and time, place, agenda and so on of a conference. This conference information 9221 can also be printed.

FIG. 150 is a flowchart showing processing of a supplier evaluation system. In step SID1, if a user requests input of supplier evaluation sheet, the evaluation sheet input screen shown in FIG. 151 is displayed on user computer 31. The user enters supplier to be evaluated 9231, evaluator 9232 and supplier evaluation score 9241. In evaluation score 9241, to be more specific, quality evaluation score 9233, cost evaluation score 9234, delivery evaluation score 9235, service (sales ability) evaluation score 9236 and technology evaluation 9237 are entered. A service score is for instance, whether or not it can cope with design change of a drawing, or evaluation of service in the case it can cope with the change. Evaluation scores 9233 to 9237 are evaluated on a scale of 10 respectively, for instance. Also, the evaluator has only to check the evaluation items in addition to entering evaluation scores, and evaluation scores can also be automatically given based on these check items. If send button 9238 is clicked on with a mouse, it proceeds to step SID2 in FIG. 150 and sends an evaluation sheet to script server 9002 (FIG. 135). Moreover, the above input can be cleared by clicking on clear button 9239 with a mouse. Furthermore, if end

button 9240 is clicked on with a mouse, it terminates the process.

FIG. 152 is a flowchart showing processing of the supplier evaluation system performed by script server 9002 (FIG. 135). In step SIE1, script server 9002 receives the above evaluation sheet from each base point user computer 31. Step SIE2 automatically totals evaluation sheets received from each base point, calculates evaluation score per supplier, and ranks the suppliers. Step SIE3 displays the evaluation results screen shown in FIG. 153 on user computer 31 according to requests from users. Evaluation results table 9251 displays supplier ranking, supplier name and total evaluation score. A user can know total evaluation score of each supplier including other base points and consider future measures. Moreover, the above evaluation results 9251 can also be transmitted to user computer 31 by e-mail.

As above, the bulletin board information providing system provides a user with bulletin board information on parts or materials including computer conference, member list, conferences information, minutes list and free talk so that the user can share various information and exchange opinions to promptly acquire various information. Moreover, it can also be arranged so that, if a user logs in to the bulletin board information providing system, the user accesses

different computer conference, member list, conferences
information, minutes list, free talk, online manual and
support contact point for each organization that the
user belongs to or for each kind of parts or materials
5 handled by the user. For instance, they can be divided
into electronic parts and mechanical parts.

The supplier evaluation system can perform
objective evaluation of suppliers by totaling
evaluation of suppliers at each base point, calculating
10 total evaluation score per supplier and ranking them.
Each base point user can know total evaluation
including evaluation of each supplier at other base
points. That evaluation becomes an important reference
in future dealings with the suppliers.

15 As above, procurement information system 13 can
select and procure worldwide parts and materials
promptly and efficiently. While large companies may
have their offices purchase parts or materials from
different or the same suppliers at different prices,
20 procurement information system 13 can acquire
procurement information of the offices and allows parts
or materials to be purchased at as low prices as
possible based on that procurement information. It is
also possible, by collectively receiving and placing
25 orders of the offices, to purchase parts or materials
in large quantity at low prices.

Procurement system 13 can meet the following

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requirements in a development department of a company.

(1) To know parts and materials used by other offices.

(2) To select most suitable parts and materials from wide-ranging information. (3) To acquire information

5 on substitutive parts. (4) To acquire new product information early.

Also, procurement system 13 can meet the following requirements in a procurement department of a company.

(1) To know purchase unit prices and suppliers of the

10 offices as to the same parts and materials. (2) To know information on substitutive parts promptly. (3)

To know ability (produced types and quantity, for instance) and situation (including social trends

inclusive of market conditions) of a supplier. (4) To

15 know purchase situation of the entire group of the company.

What is implemented by supplying a program code of software for implementing the functions of the above embodiments to a system and operating the above various
20 devices according to the program stored in a computer (CPU or MPU) of the system is also included in the category of the present invention.

In this case, the program code itself of the above software implements the functions of the above-
25 mentioned embodiments, and thus the program code itself and the means of supplying the program code to the computer, that is, a record medium storing such a

program code for instance comprise the present invention. For a record medium to store such a program code, a floppy disk, a hard disk, an optical disk, a magneto-optical disk, a CD-ROM, a magnetic tape, a nonvolatile memory card, a ROM and so on can be used, for instance.

Any of the above embodiments shows merely an example of crystallizations in implementing the present invention, which should not lead to interpretation of technical scope of the present invention in a limited manner. To be more specific, the present invention can be implemented in various forms without deviating from its idea or its major characteristics.

As described above, the present invention allows procurement information on parts, materials and so on to be acquired promptly and easily so that they can be selected and procured promptly and efficiently. Large companies can acquire procurement information of their offices and purchase parts or materials at as low prices as possible based on that procurement information. It is also possible, by collectively receiving and placing orders of the offices, to purchase parts or materials in large quantity at low prices.